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मानक

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IS 4402 (2005): Textiles - Fishing Nets - Netting - Basic Terms and Definitions [TXD 18: Textile Materials for Marine-Fishing Purposes]



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Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

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भारतीय मानक
मछली पकड़ने के जाल — जाल का कपड़ा —
मूल शब्द और परिभाषाएँ
(दूसरा पुनरीक्षण)

Indian Standard
FISHING NETS — NETTING — BASIC
TERMS AND DEFINITIONS
(*Second Revision*)

ICS 01.040.65; 65.150

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NATIONAL FOREWORD

This Indian Standard (Second Revision) which is identical with ISO 1107 : 2003 'Fishing nets — Netting — Basic terms and definitions' issued by the International Organization for Standardization (ISO) was adopted by the Bureau of Indian Standards on the recommendations of the Textile Materials for Marine/Fishing Purposes Sectional Committee and approval of the Textile Division Council.

The text of ISO Standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'.
- b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards which are to be substituted in their places, are listed below along with their degree of equivalence for the editions indicated. However, that International Standard cross-referred in this adopted ISO Standard, which has subsequently been revised, position in respect of that latest ISO Standard has been given:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
ISO 858 Fishing nets — Designation of netting yarns in the Tex System	IS 4640 : 1993 Fishing nets — Designation of netting yarn in the Tex system	Identical
ISO 1139 Textiles — Designation of yarns	IS 3689 : 1966 Conversion factors and conversion tables for yarn count	Equivalent
EN ISO 1530 : 2003 Fishing nets — Description and designation of knotted netting (ISO 1530 : 2002)	IS 4641 : 2005 Fishing nets — Description and designation of knotted netting	Identical

Indian Standard
**FISHING NETS — NETTING — BASIC
TERMS AND DEFINITIONS**
(Second Revision)

1 Scope

This European Standard gives the principal terms relating to netting for fishing nets, together with their definitions or, in some cases, the method of expressing dimensions.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN ISO 1530:2003, *Fishing nets — Description and designation of knotted netting (ISO 1530:2002)*.

ISO 858, *Fishing nets — Designation of netting yarns in the Tex System*.

ISO 1139, *Textiles — Designation of yarns*.

3 Terms and definitions

For the purposes of this European Standard the following terms and definitions apply.

3.1

netting

a meshed structure of indefinite shape and size composed of one yarn or of one or more systems of yarns interlaced or joined, or obtained by other means, for example by stamping or cutting from sheet material or by extrusion

3.2

netting yarn

all types of yarns¹⁾ suitable for the manufacture of netting

NOTE 1 The principal types of netting yarns are twines. The latter are defined below.

The size of netting yarn is indicated by its linear density expressed in the unit tex of the Tex system in accordance with ISO 858. The size of the final product is expressed by the "resultant linear density" in accordance with ISO 1139.

NOTE 2 The resultant linear density is the reciprocal of "runnage" which expresses the length per unit mass, in metres per gram or per kilogram, for example.

1) The definition in ISO 1139 denotes "yarn" folded yarn and cabled yarn as a general term embracing a single yarn (including monofilament) multiple wound yarns.

3.2.1

netting twine

the product of one twisting operation embracing two or more single yarns or monofilaments

3.2.2

cabled netting twine

the product of further twisting operations embracing two or more netting twines

3.2.3

braided netting twine

the product of braiding or plaiting netting yarns and/or netting twines

3.3

mesh

a design formed opening, surrounded by netting material. There are several types of mesh shapes:

3.3.1

diamond mesh

a mesh composed of four sides of the same length

3.3.2

square mesh

a diamond mesh in which adjacent sides are at right angles

3.3.3

hexagonal mesh

a mesh composed of six sides, out of which the length of one pair of opposite sides can be different from that of the other four sides, in case of an irregular hexagon

3.4

size of mesh

3.4.1

length of mesh side (also referred to as half mesh)

the distance between two sequential knots or joints, measured from centre to centre when the yarn between those points is fully extended as shown in Figure 1

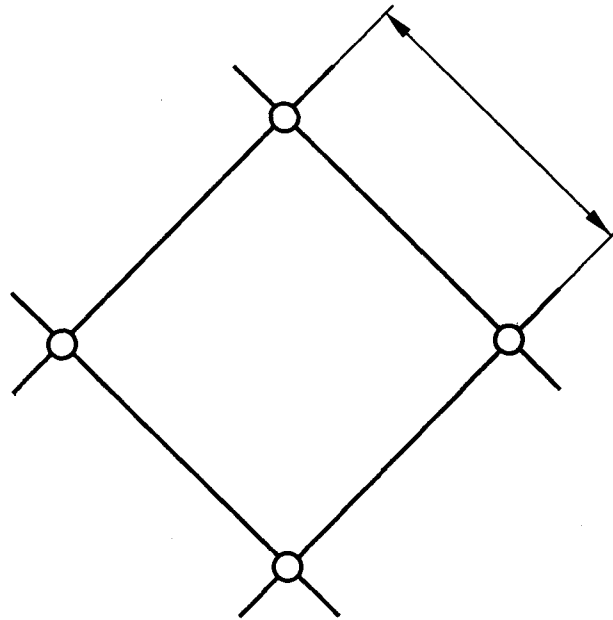


Figure 1 — Length of mesh side

NOTE In hexagonal meshes two different values are possible in case of an irregular hexagon.

3.4.2
length of mesh
(see Figure 2)

- a) for knotted netting, the distance between the centres of two opposite knots in the same mesh when fully extended in the N-direction (see definition 3.5.1.1);
- b) for knotless netting, the distance between the centres of two opposite joints in the same mesh when fully extended along its longest possible axis (see definition 3.6.1.1).

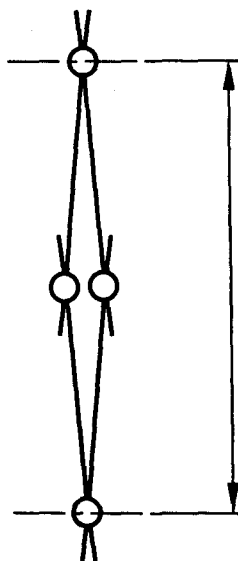


Figure 2 — Length of mesh

3.4.3
opening of mesh
(see Figure 3)

- a) for knotted netting, the longest distance between two opposite knots in the same mesh when fully extended in the N-direction (see definition 3.5.1.1);
- b) for knotless netting, the inside distance between two opposite joints in the same mesh when fully extended along its longest possible axis (see definition 3.6.1.1).

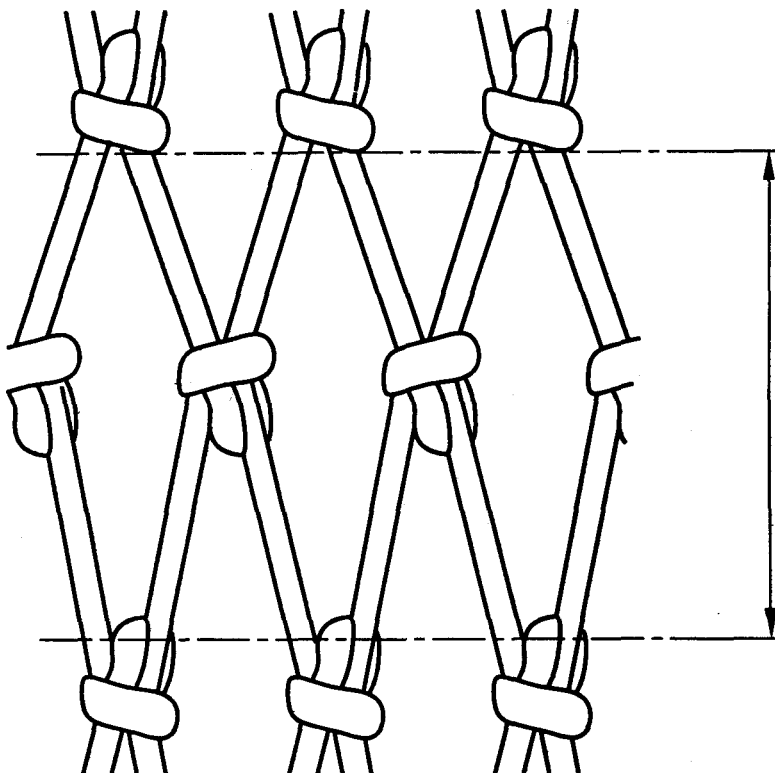


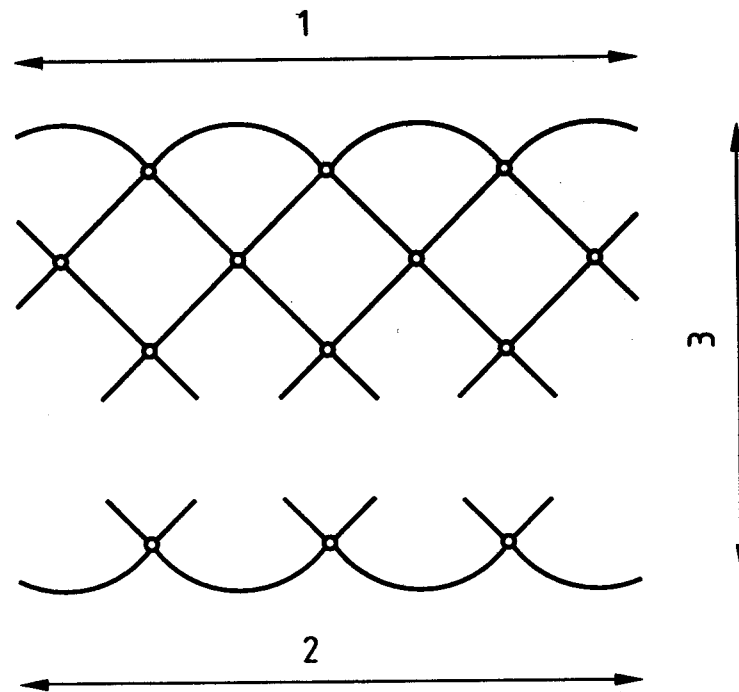
Figure 3 — Opening of mesh

3.5
knotted netting

3.5.1
general direction of the netting yarn

3.5.1.1
N-direction (depthwise)
the direction at right angles (Normal) to the general course of the netting yarn as shown in Figure 4

3.5.1.2
T-direction, (lengthwise)
the direction parallel to the general course of the netting yarn (Twinewise) as shown in Figure 4



Key

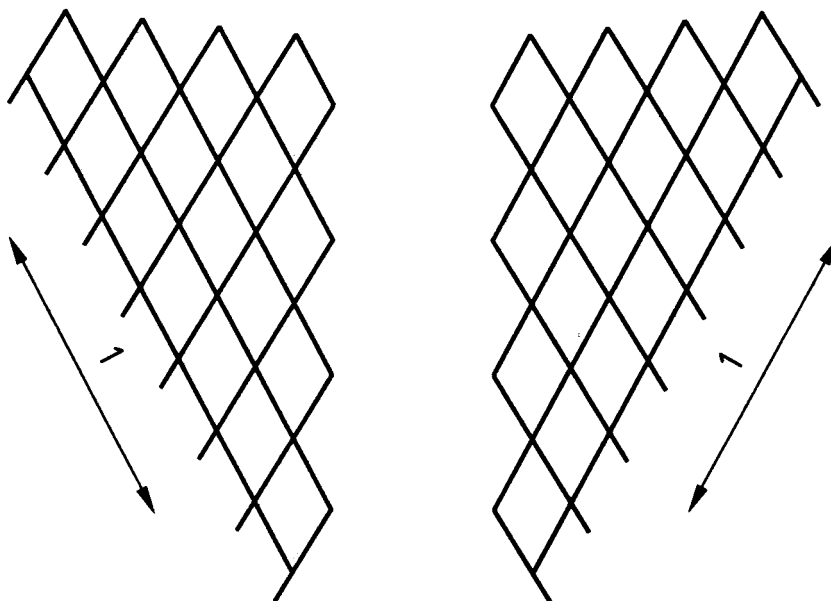
- 1 T-direction (lengthwise)
- 2 General course of the netting yarn
- 3 N-direction (depthwise)

Figure 4 — N-Direction (“Depthwise”) and T-Direction (“Lengthwise”)

3.5.2 independent of the general direction of the netting yarn

3.5.2.1 AB-directions

the directions parallel to a rectilinear sequence of mesh bars, each from adjacent meshes as shown in Figure 5



Key

1 AB direction

Figure 5 — AB-directions

**3.6
knotless netting**

netting constructed by joining together the filaments in the twines to form meshes without external knots

3.6.1

general direction of the netting yarn or longest axis of the mesh

NOTE Direction in knotless netting can usually be related to the general course of the netting yarn, but this is not always so because the general course of the netting yarn cannot in every case be determined. Usually, the direction of the longest possible axis of the mesh is parallel to the general course of the netting yarn. If the two axes are equal, the direction of the netting cannot be determined and the mesh size may be determined in either direction.

3.6.1.1

N-direction (depthwise)

the direction at right angles to the general course of the netting

3.6.1.2

T-direction (lengthwise)

the direction parallel to the general course of the netting

3.6.2

independent of the general direction of the netting yarn

3.6.2.1

AB-directions

the directions parallel to a rectilinear sequence of mesh bars, each from adjacent meshes

3.7

size of netting

the number of meshes in the T-direction (meshes long (ML)) and the number of meshes in the N-direction (meshes deep (MD)) multiplied together, or the number of meshes in one direction and the length indicated in a recognized unit, for example metres, of the other direction, the netting being fully extended while the measurement is made

Examples:

1 000 ML	x	100 MD	or	1 000 T	x	100 N
1 000 ML	x	5 m	or	1 000 T	x	5 m
10 m	x	200 MD	or	10 m	x	200 N

A complete designation of the size of the netting requires, in addition, the indication of characteristics in accordance with 3.6 and 5.5 of EN ISO 1530:2003.

3.8

average length of mesh

with the netting fully extended in either the N direction for knotted netting or the direction of the longest axis of the mesh for knotless netting, the depth or length of the netting in metres divided by the number of meshes deep (MD) or meshes long (ML) respectively

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Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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